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ABSTRACT

Despite increased attention given to alcohol use and its negative consequences on college campuses, national data indicates that there have been only small decreases in levels of alcohol consumption for over two decades. This guide describes how one university was able to decrease heavy drinking on campus by 29.2% during a four-year period. Their prevention efforts were a blend of two approaches: social norming and environmental management. A social norms campaign was used to educate students about the amount of drinking norms on campus since contrary to what they perceived, heavier drinkers represented the minority while moderate drinkers represented the majority. The environmental management or public health approach emphasized the responsibility the college had in creating prevention policies that established and maintained a healthy and safe environment. The approach involved identifying individuals and organizations on campus that had a stake in alcohol prevention and gaining their public support for policy development and prevention efforts. Suggestions are provided for the development of a social norms media campaign and the evaluation measures that can be part of the planning process for implementing a social norms model. (Contains 22 references and a list of 13 resources.) (JDM)

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ED 447 406

A Practical Guide to Alcohol Abuse Prevention:

A CAMPUS CASE STUDY IN IMPLEMENTING SOCIAL NORMS AND ENVIRONMENTAL MANAGEMENT APPROACHES

CG030565

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A variety of federal sources have funded the UA's alcohol and other drug prevention efforts, specifically its social norms media campaign. In 1994 the Campus Health Service received funds from The Center for Substance Abuse Prevention (CSAP) High-Risk Youth Demonstration Grant program for a five-year project to implement and test strategies to prevent heavy drinking at the UA Campus (Grant Number: 1 HD1 SP06343). Campus Health also received two-year institutional and research grants from the Fund for the Improvement of Post-Secondary Education (FIPSE) and two additional two-year grants from the Department of Education (Grant Number: S184 H70008 and S184 H980007).

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"Most **people...**

don't drink as much as others think they do..."

-UA student

INTRODUCTION

Four or fewer. What does this phrase have to do with a 29.2 percent decrease in heavy drinking at The University of Arizona (UA)? Plenty, it seems, based on a four-year project at the UA that uses a blend of social norms and environmental management approaches. This guide is designed to describe just how the UA has achieved such promising results over the last four years.

The UA is a public land grant research university with 34,000 students. Like most large university and college campuses across the country, the UA has struggled with the negative consequences of heavy drinking in residence halls, at off-campus parties, and at campus events. "Binge drinking," defined in the college population as the consumption of five or more drinks at a sitting in the last two weeks [1][1], has been a growing concern as the UA has moved closer to its vision of creating and maintaining a healthy learning community. The UA's "binge drinking" rate of 43 percent in 1995 was on par with the "binge drinking" rates reported nationally - 44 percent [2], 39 percent [3] and 40 percent [4].

Heavy drinking in college has often been described as a rite of passage. Over time, both researchers and college officials have become increasingly aware that heavy alcohol use can make the passage through college dangerous both for drinkers and those whom they affect. Heavy drinkers are more prone to at-risk behaviors such as driving under the influence, engaging in fights or arguments, and having unsafe sex [2,3]. Alcohol is involved in the two leading causes of death—car accidents and falls—among young adults in the age range of most college students, 17 to 25 [5,6].

[1] Wechsler and colleagues define binge drinking as five or more for men and four or more for women [1].

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Heavy drinkers also may create problems for their classmates and other members of the community. Such problems include assaults, unwanted sexual advances, and property damage.

Despite increased attention given to alcohol use and its negative consequences on college campuses, the national data indicates that there have been only small decreases in levels of alcohol consumption for over two decades [4]. In light of these consistent national levels, the approach used by the UA that resulted in a 29 percent decrease in heavy drinking merits study.

THE UA'S APPROACH TO REDUCING HEAVY DRINKING

The office of Health Promotion and Preventive Services (HPPS), Campus Health, is responsible for alcohol and other drug prevention activities at UA. HPPS is well suited to this role because it is the campus agency responsible for public health.

Campus Health is one of five units that comprise Campus Health and Wellness. The Offices of Student Life, Human Resources and Campus Health and Wellness are the three components of the Division of Campus Life and answer directly to the Vice President. Campus Life is responsible for the quality of life for all members—students, faculty, and other personnel—of the campus community. This structure is a recent significant organizational paradigm shift at the UA that elevates the importance and visibility of public health and safety within the institution.

The UA began stepping up its AOD prevention efforts in the early 1990's. Growing pressure from community groups about the consistency of alcohol policies and their enforcement, worries about alcohol-related legal liability, and continuing concern by law enforcement personnel drove the UA's Campus Health Service's early activities. These early alcohol prevention strategies tended to be reactive rather than proactive in nature and focused on educating individuals.[1]

Campus Health staff at the UA were concerned that, historically, programs developed to reduce or eliminate AOD use have had little or no success. Moreover, traditional AOD education programs have had limited impact on actual alcohol use among college students [7,8,9]. In addition, simply educating students about drugs and their effects—the knowledge approach—has also shown little overall benefit in reducing harm and risk. Similarly, an abstinence-only message fails to respond to older adolescents and those who have already started drinking [10,11].

As a result of these findings, Campus Health staff began a two-pronged approach with the goal of making an impact on alcohol use patterns. The approach included social norming and environmental management. By linking these two approaches, the UA Campus Health staff hoped to achieve the following:

1) Reduce the number of undergraduate students who drink heavily
2) Reduce the amount of alcohol consumed by heavy drinkers to more moderate levels
3) Correct campus misperceptions that most college students are heavy drinkers who cause harm to themselves and others
4) Increase the effectiveness of campus alcohol policies and enforcement
5) Change key stakeholder perceptions so that faculty, staff, advisors and others do not perpetuate heavy drinking myths
6) Target campus and community events, associated in the past with unsafe drinking practices, for policy and enforcement change through collaboration with community partners

Campus Health staff began applying for federal funds through the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) and the Center for Substance Abuse Prevention (CSAP) to increase the momentum of the UA's AOD prevention efforts. These grant funds served as the impetus for campus-wide change.

[1] Reactive programming occurs in direct response to a specific incident. For example, an alcohol-related incident occurs at a university club function and the club status is revoked for a year. Proactive programming is in response to an identified risk with the goal of preventing potential problems. For example, initiating a policy at homecoming festivities that requires all tents planning to serve alcohol to hire professional bartenders to better control underage drinking.

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THEORIES BEHIND THE UA'S APPROACH

As noted previously in this work, the UA's current prevention efforts are a blend of two approaches: social norming and environmental management. The following sections provide background on each of these.

SOCIAL NORMS

The work of Wes Perkins and Alan Berkowitz [12,13] undergird the social norms approach. These researchers discovered that college students greatly over-perceive alcohol use among their peers. Students may feel that in order to be accepted by their peers, they must match what they perceive to be others' use of alcohol and other drugs. Research on college campuses indicates that students misperceive campus norms and attitudes regarding alcohol and other drugs, greatly exaggerating others' use of those substances. Hence there is disparity between actual drinking norms and perceived drinking norms, regardless of level of use and demographics such as gender and place of residence. In addition, students become carriers of the misperception, regardless of their level of personal AOD use. As a result of their research, Perkins and Berkowitz speculated that giving students accurate feedback about campus AOD norms could effectively reduce drinking for heavier drinkers (who represent the minority of students) and support the safer behaviors of the moderate drinkers and non-drinkers (who represent the majority of students).

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Michael Haines of Northern Illinois University (NIU), an institution of 23,000 students, developed the first program aimed at addressing campus drinking misperceptions utilizing social norms marketing techniques [14].[1] Haines and his staff developed a social norms media campaign to inform students that the majority of their peers were moderate and safe drinkers. He transmitted this normative information through advertisements, fliers and posters using what he called the "P.I.E." philosophy [15]:

P **positive messages**

Beneficial, constructive, affirmative, hopeful, optimistic

I **inclusive messages**

Incorporating, embracing, involving, comprehensive

E **empowering messages**

Them/potent, control, energy authority, strength

The resulting social norms campaign at NIU focused on educating students about accurate AOD norms on campus, without the use of "scare" tactics or admonishments. As a result of this approach, NIU has reported reduced heavy drinking over a ten-year period, with an overall 44 percent reduction [16]. The NIU survey data indicate 31 percent fewer alcohol-related injuries to self and 54 percent fewer alcohol-related injuries to others among its student population [17].

This approach had not been studied on a campus as large as the UA. Campus Health at the UA decided to adopt Haine's social norms approach because staff believed that it held promise as an effective way to reach the majority of students and key stakeholders (other potential "carriers" of the misperception). The social norms approach could repeatedly expose students and stakeholders to a consistent message in order to correct misperceptions about student drinking.

One particularly appealing aspect to this approach was its cost effectiveness when compared to more traditional prevention activities. The message could be consistently repeated and not subject to degradation over time. A description of a cost benefit analysis is presented later in this guide (see section on cost).

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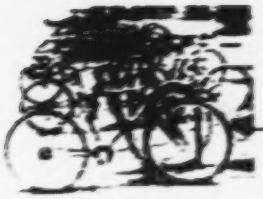
[1] There is much confusion about social marketing and social norming. For the UA's purposes, the Campus Health staff defines of social norming as the content to be transmitted and social marketing as the vehicle of transmission. In order for normative information to be accepted and replace campus drinking and safety misperceptions, the target population must be exposed to the information multiple times. Social marketing strategies can deliver the content with the frequency and appeal to influence knowledge, attitudes and beliefs about campus drinking practices.



ENVIRONMENTAL MANAGEMENT APPROACH

In addition to looking at programmatic and individual change as a result of implementing a social norms campaign, the Campus Health staff at the UA expanded its focus to include the campus community. William DeJong, Director of the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Prevention, has termed this public health approach "environmental management". This approach emphasizes the responsibility that institutions of higher education have in creating prevention policies that establish and maintain a healthy and safe environment for students [18].

Environmental management, as a public health approach, grapples with the social, political, and economic context of alcohol-related problems. It involves identifying individuals and organizations on campus and in the community who have a stake in alcohol prevention (stakeholders) and then developing strategies for gaining their public support for policy development and other prevention efforts. Building key stakeholder networks has aided the public health approach to AOD prevention at the UA over the last five years. As Campus Health began planning more dynamic, proactive approaches, they gravitated toward an environmental model recently articulated by DeJong and his colleagues [18]. This model is presented in Figure 1.

The framework presented in Figure 1: Spheres of Action moved Campus Health to:

1) Identify potential campus and community partners and resources
2) Define spheres of activity
3) Design an outcome-based plan that targets proactive prevention activity
4) Mobilize activities across campus and the community
5) Acknowledge the complexity of the agendas driving key stakeholders within the UA and the community and unite them around a common purpose

APPLICATION OF SOCIAL NORMS AND ENVIRONMENTAL MANAGEMENT APPROACHES AT UA

Prior to implementing either a social norms or environmental management approach, it is important to first conduct an assessment of the environment. This assessment gives prevention professionals a view of the alcohol and other drug-related landscape at their institution, including current messages being transmitted to students. It also helps staff identify potential allies at their institution and tells them which environmental targets might be good starting points.

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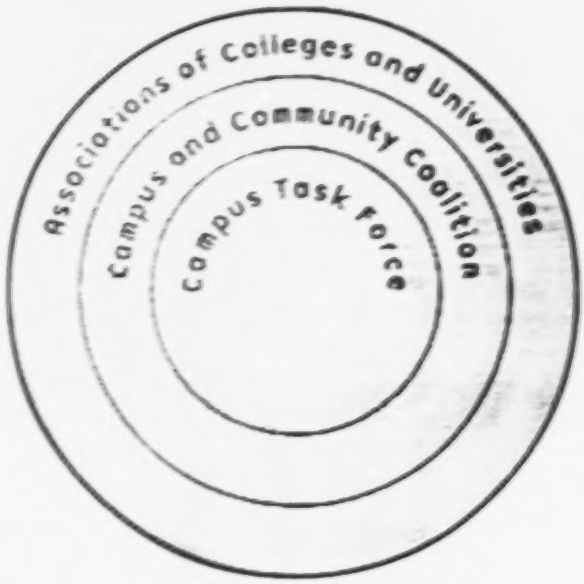
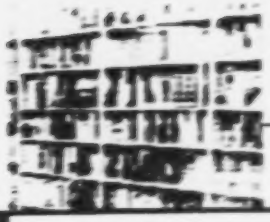


Figure 1: Spheres of Action

This assessment should include a review of existing AOD-related policies and their enforcement, both on and off campus. In addition, a review of materials currently distributed to students about these policies, the institution's messages regarding AOD, and other alcohol and alcohol-free promotions should be included in order to uncover mixed messages being given to the student and community. An effective environmental assessment also includes a review of existing AOD-related initiatives (both use and non-use messages) and efforts across campus such as drug prevention programs, sanctions, AOD-related materials in the academic curriculum, and AOD-related counseling and peer programs. Tools such as The College Alcohol Risk Assessment Guide [19] help prevention staff in collecting messages related through posters on kiosks, bulletin boards, newspapers, and other media; for example, scanning bulletin boards for bar promotions, alcohol-free events and alcohol industry-sponsored activities or keeping copies of local press coverage of alcohol-related incidents that can influence perceptions.



THE UA SOCIAL NORMS MEDIA CAMPAIGN

The UA's social norms media campaign had three goals:

1) To advertise the norms around alcohol use on the university's campus and thus change existing misperceptions
2) To support those norms with information about lesser known or understood facts related to alcohol safety
3) To change public conversation about alcohol use among UA students, staff, administration and the community

Delivery of the normative messages was done primarily through print media.

Over the course of four years, social norms advertisements were published in the campus newspaper, the Arizona Daily Wildcat.

Figure 2

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The social norms ads directly addressed misperceptions regarding alcohol use at the UA by presenting majority data gathered from UA undergraduate surveys (Figure 2- campaign ad). These ads appeared approximately once per week during fall and spring semesters.

In addition to frequent exposure to the normative ads in the Wildcat, the UA Campus Health staff identified prominent awareness themes such as National Collegiate Alcohol Awareness Week and Sexual Assault Awareness Week as other opportunities for normative messaging. Two- to four-pages of information that repeated the advertisements' normative messages and addressed additional issues related to alcohol safety were published in the center of the Wildcat during awareness weeks. To support and enhance the impact of the social norms media campaign, normative messages were also distributed to the campus community in the form of posters, newsletter articles, bulletin boards and local and community newspaper articles.

Five Step Development of a Social Norms Media Campaign

A successful social norms media campaign requires a commitment to data gathering and analysis. Several surveys and other data collection instruments were used throughout the study period to assess students' AOD-related behaviors and perceptions and to discover where they gather information about AOD use among their UA peers (see Quantitative Measures section for more detailed information).

Step 1:

Collect and analyze data, and select preliminary campaign message

The social norms approach mandates that campaign messages consist of accurate majority (normative) statements that address campus drinking misperceptions. The UA data revealed that students overestimated the amount of alcohol their peers were consuming. To correct this misperception, a message was developed around the actual drinking norm which was much lower than what students presumed.

Although students misperceive a lot of things, not all of these misperceptions will be transformed into a social norms media ad. The trick is to identify misperceptions that once corrected, could lead to behavior change. UA staff focused on the following key factors:

amount consumed per occasion (how much),
frequency of occasion (how often),
level of intoxication (not intoxicated to extremely intoxicated), and
protective factors that slow intoxication (i.e., sipping or eating) **or increase safety** (i.e., selecting a designated driver or watching out for a friend at a party).

Shifting from a problem-focused review to a majority-focused review of the data can be the most daunting part of data analysis for social norming. It required staff to change gears and remember the task - bringing perception in line with actual behavior. Choosing survey questions that uncovered majority behaviors that staff were comfortable in reporting was key. Commonly asked questions included:

"If you drink...

when you party, how many drinks do you usually have?"

how many nights a week do you usually party?"

how many drinks did you have the last time you partied?"

"Over the course of how many hours did you drink?"

"Please estimate the amount of drinks you had during the first hour, second hour, third hour..."

Surveys also included questions about gender and weight so that staff could calculate average blood alcohol concentration (BAC) levels. In addition, questions about protective behaviors - what the respondents do to drink safely - were also included. For example:

"When I drink I always, usually, rarely or never,...

eat before and during the time I'm drinking"

choose beverages with alcohol contents I know"

(for women) have one or fewer per hour when I drink"

(for men) have two or fewer per hour when I drink"

The traditional focus on the "binge drinking" question may not give enough useful information for a social norms campaign. For example, knowing the rate of "binge drinking" is not descriptive in itself. The practitioner needs to identify the information common to the majority of students. Traditionally, health educators have sought to identify behaviors they hoped to correct; but in this model, analysis aims to uncover majority information that supports the drinking behaviors the practitioner wants to increase. For example, on the UA survey over 50 percent responded "zero" to the question, "In the past two weeks, how many times did you have five or more drinks in one sitting." The normative message from this data is that most students had four or fewer drinks per occasion in the last two weeks. A survey question that asks, "How many drinks did you usually have per occasion in the last two weeks," would allow the practitioner to discover precisely where the majority fall regardless of whether the number is higher or lower than five.

Since most students believe that their peers drink much more (and surveys should solicit this information), correcting the misperception can begin by stating the amount consumed by the majority, for instance, 6 or less. Six or less, however, may not feel like a low-risk target and is likely to create controversy among administrators, faculty and others who are exposed to the campaign. Beginning with other data that corrects misperceptions around alcohol use and related behaviors may be a wiser approach and there are many to choose from. Analysis of consequences and drinking levels can yield useful supporting data (i.e., students who did not get into a fight and the amount they typically consume).

Step 2:

Format, placement and design

Format and placement of the social norms media ads were highly influenced by data gathered by Campus Health staff regarding how students prefer to get their information. Surveys included questions about where students typically got their information, and in what form they desired to receive information. For example, students were asked how often they read the Wildcat, how often they listened to KAMP radio (the campus radio station), or whether they would hang a health-related poster in their living space. Students' responses guided Campus Health staff in their decisions about where to invest their marketing dollars.

The format selected for the UA ad campaign was a 3 x 8 column inch black and white ad published weekly in the Wildcat. A majority of students read the Wildcat 3-4 times per week and the advertising fees were modest. Although advertising on the UA campus radio was perceived by staff to be an inexpensive and easily accessible vehicle, very few students reported tuning in. This meant that few would hear the message even once. Students highly endorsed posters and flyers as other messaging formats; but at a large school, multiple distributions of such items could create a logistical problem.

Campus Health staff monitored the shelf-life (the length of time a promotional piece was displayed) of flyers on classroom bulletin boards as well as table tents in the Student Union. Whereas flyers remained posted on

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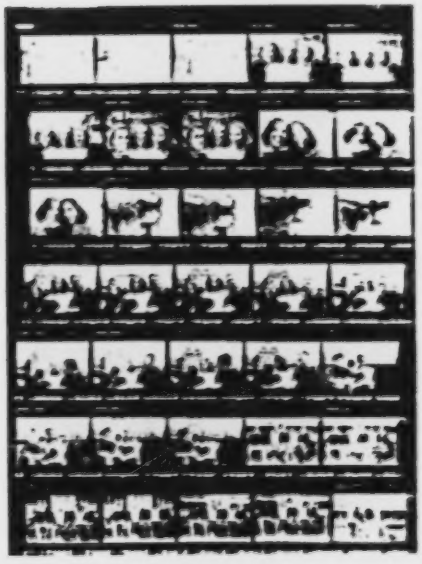
bulletin boards at the six week interval, table tents had disappeared after only one or two days. Although school policy had guidelines for the type and rotation of material for posting, building monitors, custodians and cafeteria staff remained the most influential factors in shelf-life.

Design selection was also influenced by gathering information about the target population. The graphic designer and the media team regularly reviewed magazines, design books and stock photography to see how commercial advertisers design for a college population. Close attention was paid to trends in color and styles. Designs of magazine themes, pull-out inserts, television ads and direct mailings all contributed to the media campaign design process.



Step 3:

Produce pilot ads

Pilot ad production consisted of two steps. The first step was to conduct a photo shoot and select the images that would be used in the social norms media campaign. The following actions were taken by the media team to complete this step:

- **Reviewed commercial stock photo books looking for examples of current images that appeal to the target population**
- **Selected images staff predicted would be emotionally appealing to students - ones that could be stylistically recreated**
- **Arranged a photo shoot with photographer and models**
- **Obtained signed consent forms and conducted the photo shoot**
- **Reviewed contact sheets and made initial selections**
- **Sent student workers to obtain target group feedback**
- **Chose the final images**

The second step consisted of integrating these images into three or four pilot print designs. Haines research at NIU and market research at the UA revealed that effective print designs should consist of the following elements: a normative message, an engaging photo of students in a familiar campus location, a credible data source, drink equivalency information, and a recognizable logo (in this case, the UA Campus Health logo). The overall goal was to engage students on an optimistic, emotional level with material that is intelligent, accurate, familiar, and non-"preachy" (see figure 3 on the next page).

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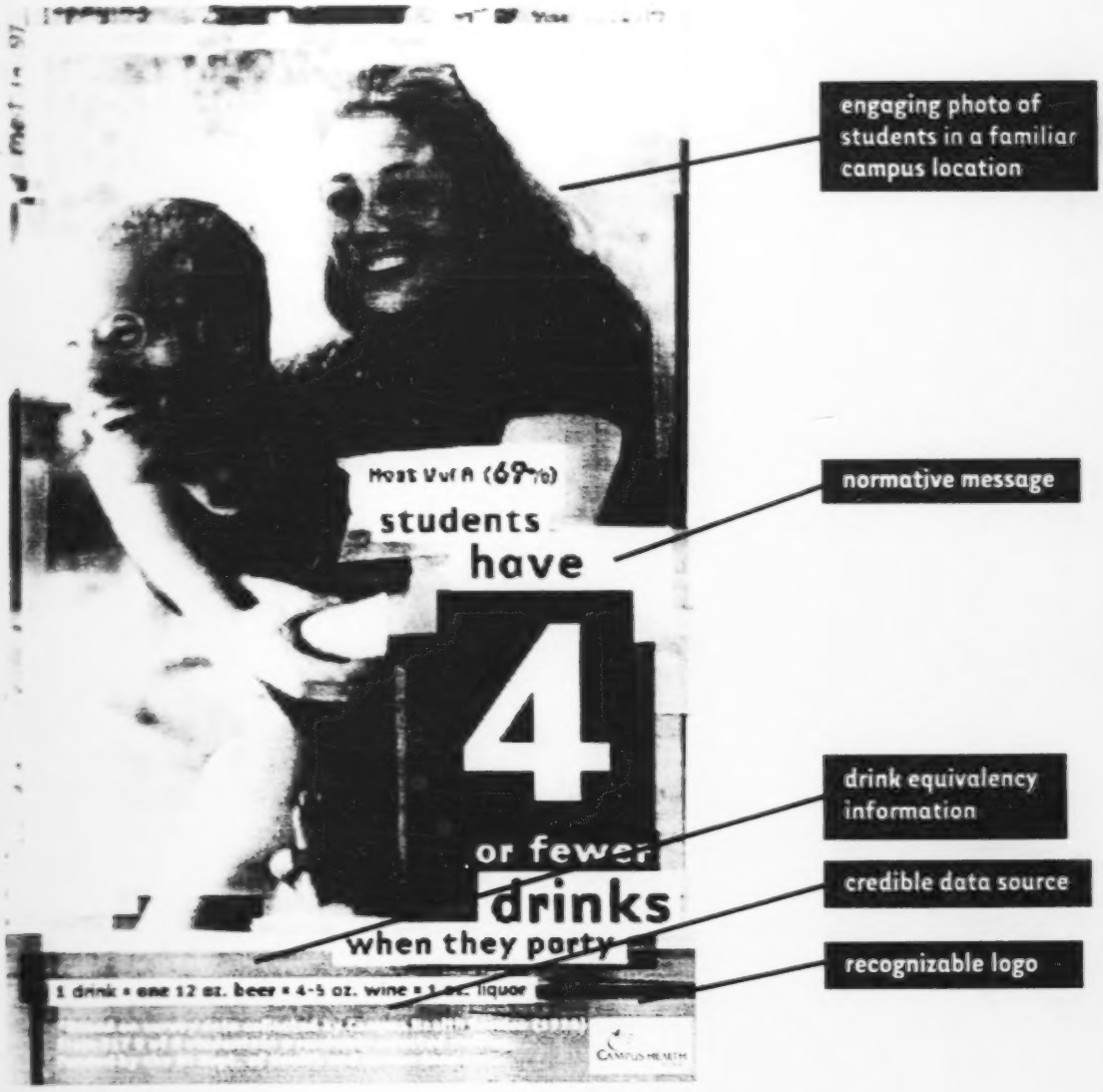

Figure 3

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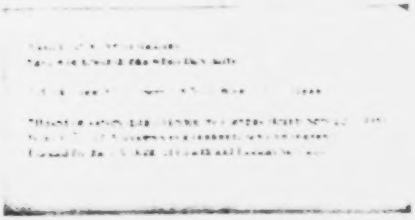
*" **Students** tend to read top to bottom, left to right."* -M. Valencia



BASIC DESIGN PROCESS

text-

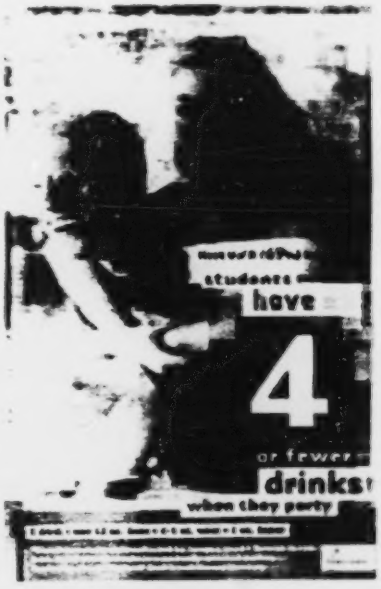
normative message, drink equivalency, data source

layouts-

rough sketches, computer outputs

final output-

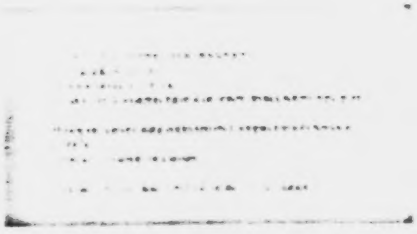
camera ready art



TEXT

LAYOUTS

FINAL ADS



"As a visual designer one creates form and function from a conceived idea. This idea is the result of research and observation and ... Thus, the designer integrates, coordinates, and manipulates visual elements to reinstate the idea in terms of a visual design."

-M. Valencia

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Campus Health staff came to understand this goal through trial and error. Examples of some of the more humorous early campaign blunders include:

Campaign I - Students Speak - Good News:

Unfortunately, these ads cannot be shown because photo consent forms were lost (see Figure 4). Lesson one - set up a system for obtaining and documenting consent, then store them in a safe place. This first campaign featured composite pictures of JA students and care was taken to include all campus ethnicities. Ads contained multiple messages providing majority data about number of sexual partners, number of drinks consumed at a sitting in the last two weeks, number who smoke, etc. Some of the comments generated from this campaign were: "too much information;" " not sure what's important;" " don't identify with these students;" " students don't seem to know or like each other;" and, "good news implies bad news."

Figure 4

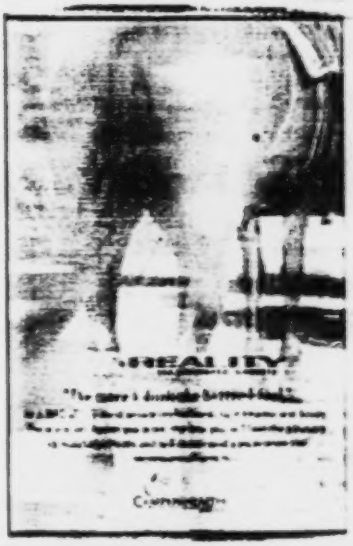

Figure 5

Campaign II - Myths and Realities:

This campaign was designed by a local advertising agency and featured the tag line "Myths and Realities, the Difference is Reality". A message was combined with either a humorous scene (i.e., backside of a horse) or a familiar scene (i.e., room after a party - Figures 5 and 6 respectively). Messages were either informational or normative. For example, the horse ad contained information about the positive effects of alcohol at low doses. The party ad stated that most students drink 4 or fewer drinks when they party. Student feedback generated from this campaign included "confused by the tag line:" "are you saying this is true or false;" "are you trying to interest me in a punch line that has yet to come:" and, "I remember the photo but not the message". Moreover, the horse and heavy drinking party images did not correspond with the information they accompanied. This encouraged students to discount the information.

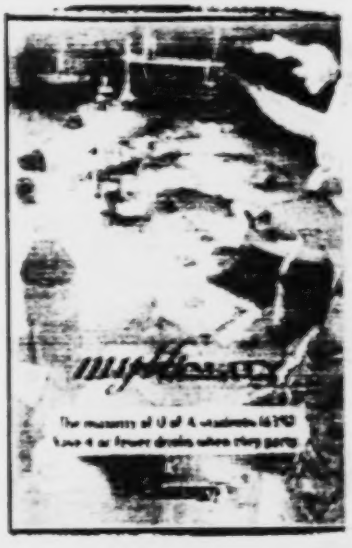

Figure 6

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The following suggestions are provided to help ensure a successful pilot piece:

- Hire a photographer and shoot campus-specific photographs this will add familiarity and credibility to the media campaign.

- Select student models who drink moderately or not at all. Using a model who drinks heavily in a moderation ad may lead students to discount the information and thus threaten the credibility of the entire campaign.

- Obtain consent forms from students used in the photo shoot **during** the actual shoot. This is done for copyright and legal reasons as well as protection to the professional integrity of the campaign (i.e., avoid student model complaints and legal issues).

- Strive for realism. Use groups of students who know each other well and place them in settings where they are having fun. The goal is to have them appear natural and at ease in front of the camera. This increases students' ability to identify with the message.

- Select photos that are conceptually consistent with and/or connected to the message. Photos that are not obviously related to the main message may confuse students. For example, the ad that featured the hind-end of a horse resulted in a memorable ad, but one in which the message was lost. The advertising agency was very good at product recognition, but not trained in social marketing.

- Use white space effectively in the design to help the ad stand out among other ads competing for reader attention. This can be done by limiting the amount of information, and striving for clarity and simplicity in the ad layout. Campus Health staff found that the larger the print and the closer the message was to the top of the page, the more importance students attributed to the words. Ads with multiple messages were not as effective.

- Repeat some visual design elements across all campaign ads. For example, lead with the most important information and adjust font size to emphasize key information. Take care not to introduce too many different elements in the campaign (i.e., keep the same font formats). The original instinct of Campus Health staff was to change the format of ad layouts to create variety and demonstrate creativity. However, media recognition is enhanced by familiarity. Each year design and messages were updated, but key familiar elements remained the same.

- If resources prevent the inclusion of a photograph with the main message, develop a text-only media campaign. Experiment with font sizes and styles to create an appealing and effective ad. One of UA's most memorable ads according to students, was a text-only ad.

- Monitor the placement of ads appearing in a campus newspaper. A campaign ad appearing next to an alcohol ad or next to an article on an alcohol-related incident may influence how readers perceive the normative message. Campus newspaper advertising departments generally keep data on readership preferences, and may be of help. For example, men tend to go to the sports page, and the back page of the newspaper is frequently sought after by other advertisers.

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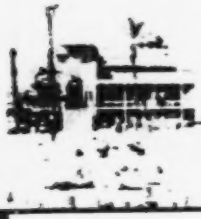

Step 4:

Conduct market tests

A variety of market tests were conducted throughout the development and implementation of the UA social norms media campaign. Key informant and focus group interviews were used primarily for the purpose of initial discovery. Campus Health staff frequently interviewed students to obtain anecdotal information not available on surveys. This helped the campaign to stay current and to better capture the student perspective. Information collected during these interviews was also used to design survey questions and identify appropriate language and definitions common to the target group. For example, Campus Health staff discovered that the word "party" most often meant "socializing with alcohol" to students.

Subject intercepts were used during the design phase of the media campaign. These are brief interviews in which a student worker stops students around campus and asks them to compare design elements or messages. Questions such as the following gave insight into which designs were most appealing and potentially effective for the target population:

"Which of these pictures caught your eye?"

"Can you tell me a story about the people in the picture?"

"Do you think you could be friends with these people?"

"What does the message say?"

"What do you think these people do on a weekend to have fun?"

"What feelings do you get when you look at this picture?"

"Can you repeat the information you just saw in this ad?"

Sampling of the target population for media design was conducted until consistent patterns emerged within the data. For example, a clear preference for the media piece with the least amount of information emerged after eighty men and women were sampled. Additional testing confirmed this preference. Sample sizes varied (20-100) depending upon the element being tested.

Paper and pencil market tests were used when piloting new campaign ads and served as a final test before production and distribution. During this process, samples of four or five completed ads or posters were shown to target groups of students. Group members would then fill out a one- to two-page questionnaire comparing the ads and posters and report which they liked best and least, and which provided the most and least information. Paper and pencil surveys were typically conducted in the residence halls or in classrooms. Subjects were generally given small rewards for their participation in the market research studies, ranging from a verbal thank you (for answering one or two quick questions) to candy bars or t-shirts (for paper and pencil tests) to bookstore gift certificates (for participating in key informant interviews or focus groups).

Finally, market-testing questions were also included on annual surveys. These questions asked students for their opinions about the social norms media campaign - how visible and credible they perceived the ads and posters to be.

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Step 5:

Implement the campaign

The key element that contributed to the success of the UA's social norms media campaign was the target population's regular and frequent exposure to the normative message. Vehicles used to convey the UA's normative messages included:

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CAMPUS NEWSPAPER ADVERTISEMENTS

The Arizona Daily Wildcat was the primary vehicle for the UA's social norms media campaign. The Wildcat has a circulation of 20,000 per day. It was also found to be the most popular source of information among UA students. The regular exposure to one ad per week resulted in a cumulative effect of 15 ad exposures per semester.

POSTERS

Normative messages were also delivered via a poster campaign in the residence halls. Students who displayed a social norms campaign poster in their room were randomly selected to receive $5.00 if they agreed to have their picture taken with the poster at the Campus Health building. These photographs were then displayed in the residence halls, serving as an additional campaign reinforcement.

BULLETIN BOARD DISPLAYS

Bulletin board displays reinforcing the normative messages were placed in strategic locations such as residence hall bathrooms, game rooms, laundry rooms, elevators and front desks.

NEWSLETTERS

News articles and brief announcements revolving around the normative message were included in various student and campus organization newsletters as well as in the College Student Survival Guide, a national publication that can be customized for individual campuses.

ADDITIONAL MEDIA VENUES

Other vehicles for normative messages could include placement of ads on the sides of campus shuttles, bumper stickers, magnets, Frisbees, mouse pads and screen savers. Although not tested at the UA, other campuses are successfully experimenting with delivering the normative message through campus television, e-mail and campus web sites.

THE UA ENVIRONMENTAL MANAGEMENT APPROACH

An important aspect of the UA's approach involved identifying partners or key stakeholders who could assist with the public health and safety agenda. This environmental management approach, advocated by the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Prevention, was then combined with a social norms campaign.

As mentioned earlier, the environmental management model by DeJong and colleagues [18] defines three spheres of action. The following describes the spheres of action as applied to the UA.

SPHERE 1

Associations of Colleges and Universities:

The Arizona Consortium of Universities and Colleges is a network of substance abuse prevention professionals, law enforcement and safety officers, counselors, administrators, and health educators. The mission of this group is to advocate for college AOD prevention issues state-wide.

SPHERE 2

Campus and Community Coalition:

The mission of the UA Campus/ Community Coalition for AOD Prevention is the prevention of AOD abuse among community youth, including those of college age. Members include

representatives of city government, neighborhood associations, the alcohol industry, city law enforcement, county attorney's office, as well as student leaders and campus officials.

SPHERE 3

Campus Task Force:

The UA has two separate task forces:

1) The internal Campus AOD Prevention Task Force has representatives from student affairs, academia, campus law enforcement and administration. Its mission is to facilitate changes in AOD use within their scope of activities and to partner in order to strengthen maximum impact (e.g., publicize and enforce consistent AOD policy)
2) The AOD Policy Task Force advises the highest level of administration. Its mission is to bring about systemic change through policy revision and enforcement

Three principles guide Campus Health's work within each of these spheres:

1) Relationships are established and nurtured so that collaborators pull together and not apart
2) Plans for change reflect the needs of collaborators to deal with AOD issues that directly affect their areas of responsibility in addition to the Campus Health goal of harm reduction and risk minimization
3) Interactions focus on positive, majority AOD use information instead of worst case scenarios (e.g., All college students are heavy drinkers)

Engaging and Empowering Stakeholder Networks

A first step in engaging and empowering stakeholder networks means looking around and identifying partners in prevention—those individuals and organizations or groups that have a vested interest in alcohol prevention efforts. Key stakeholders within the college arena include administrators, faculty, residence hall staff, student affairs staff, Greek life staff, athletic department staff, alumni office staff and those in the surrounding community such as liquor servers and neighborhood association representatives. Effective partnering on prevention issues hinges on empowering stakeholders to take action.

The UA used these specific strategies to promote the social norms approach among key stakeholders.

1) Campus Health staff were encouraged to serve on campus committees, where they could provide fellow committee members with information related to AOD use and related behaviors (e.g., the average college student drinks moderately if he or she drinks.) Through their committee involvement Campus Health staff assisted in the development and revision of policies related to AOD issues.
2) Key stakeholders were trained about drinking behaviors that were typical, usual and average for the majority of students and trained in how to use policies and enforcement to support these norms.
3) When a Student Needs Help, a handbook for faculty that provides a section on AOD issues, including how to identify students at risk for AOD-related problems, was developed and distributed. The handbook also suggests classroom policies and practices that may decrease heavy alcohol consumption by students on class nights and weekends.
4) Positive and accurate norms messages and data were communicated at least quarterly to deans, directors, and faculty.
5) Targets for problem-focused policy were clarified (e.g., limits on amount and safer distribution of alcohol at parties based on majority alcohol use patterns).

6) High impact, high visibility campus events were chosen as a focus for AOD policy change (e.g., tightening Homecoming and tailgating policies decreased police calls while also communicating the University's position on alcohol to students, staff, faculty and alumni alike) [20].

7) Campus and community media were engaged in constructive dialogue when regional or national college substance use issues made the news (e.g., Campus Health regularly reviewed campus data and progress, pointing out normative data and reminding the community that the majority drink safely, few drink unsafely, and some do not drink).

Building and Nurturing Stakeholder Networks

Getting policy makers to take action can be challenging. It requires tact, diplomacy, and persistence. In interviews, we discovered that most UA stakeholders believe that AOD prevention is synonymous with dramatic scare tactics and good/bad moral judgments which have proven ineffective. Adopting a public health and safety perspective with its focus on social norms and environmental management represents a paradigm shift, both for health educators and campus administrators. This change in perspective must start with the AOD prevention team and then radiate outward to include key stakeholders both on campus and in the community.

The social norms approach may take time to assimilate for key stakeholders and prevention staff alike, given their exposure to negative media images, sound bites, and tragic stories typically used to communicate AOD-related incidents and efforts. Hence, it may take considerable education and discussion about the social norms approach before stakeholders and prevention staff understand that, yes, harmful drinking and drug use are threats to campus safety, but, no, drinking and drug use are not as high as people believe. Indeed, shifting the paradigm from fear-based alcohol prevention to the social norms approach may initially generate some confusion. However, consistent exposure to the normative message is a non-defensive way to encourage stakeholders to adopt a new perspective and outlook regarding alcohol prevention. The key words in nurturing stakeholders are empowerment, persuasion, and partnership.

Following are some recommendations for building and nurturing key stakeholder networks.

1) Identify those offices or departments and people who share the goal of reducing violence, public disturbance, and liability on campus. Seek them out, explore their agendas, and begin establishing common goals.

2) Assume good intentions. Try to understand the position, traditions, and perspectives of those individuals and offices that may be hesitant to change the status quo or engage in proactive collaboration activities.

3) Use local campus data to highlight health and safety issues that support reduced liability for the college or university.

4) Maintain a health and safety stance about substance abuse and avoid debate over morality issues related to alcohol.

5) Make both short- and long-term plans for change so that the challenge of enhancing healthy behaviors and reducing substance abuse risks on campus is not overwhelming in the first year. Eliminating substance abuse on campus is a long-term goal that can best be accomplished by taking positive action one step at a time (e.g., planning a safe Homecoming by changing alcohol policies and by enforcing existing policies resulted in decreased alcohol-related neighborhood calls. Sharing the results of this collaborative effort with policy committee members reinforced our belief that we could lower alcohol-related harm.)

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6) Use multiple methods to keep key stakeholders informed and connected to the AOD prevention effort. E-mail updates, newsletters, staff trainings, and regularly scheduled face-to-face meetings can keep stakeholders in the loop (e.g., Campus Health staff found it useful, once or twice annually, to sit down and discuss key stakeholders' concerns and agendas, as well as to provide an update on campus AOD prevention efforts. Placing key stakeholders' requests at the top of the staff's to-do pile earned the staff more credibility and enhanced future cooperation.)

7) Work through senior administrative ranks to reach the highest level of decision and policymaking. Capitalize on opportunities to update senior administration on AOD issues and efforts on campus. Push for invitations to make presentations before high-level administrative committees.

8) Whenever possible, conduct polls and brief surveys or focus groups regarding public opinion on the role alcohol should play in university or college-wide events. These activities provide valuable information for policy-making committees and may serve as a reality check for those who fear a backlash from alcohol policy changes.

Overcoming Stakeholder Challenges

The Campus Health staff at the UA identified a number of challenges in working with key stakeholders.

- Frequent personnel changes, usual on most large college campuses, are one such challenge. Multiple trainings and ongoing updates for key stakeholder groups are necessary to keep stakeholders informed and involved.
- Pressure from local alcohol distributors to sponsor campus events is another ongoing challenge. Such pressure may be relentless and often very public. Strong stakeholder networks, especially among top campus administrators, will be necessary to resist this pressure.
- Yet another challenge is posed by campus media. Freedom of press issues for the campus newspaper, combined with economic pressure, often result in an overabundance of advertisements for local bars that encourage heavy drinking. Colorfully advertised drink specials and "happy hour" promotions also fortify the misperception that college life and heavy drinking are integrally linked and typical for all college students. Campus Health staff at the UA found that persistent, constructive dialogue with campus newspaper staff is an important first step in negotiating change. For example, we negotiated a standard with the Wildcat advertising department that discourages ads that promote drinking games and heavy drinking specials (e.g., "2 for 1," "bladder busts," and "quarter drafts").

Campus Health at the UA spent substantial effort getting to know its key stakeholders and their issues. They could then work more effectively with these stakeholders and other opinion leaders to create a common agenda. Shared successes on campus emerged, for example Homecoming with fewer alcohol-related incidents. Public appreciation bolstered stakeholder support. The use of such win-win strategies helped Campus Health overcome stakeholder resistance and create a strong, dedicated key stakeholder network over the last several years.

MEASURING OUTCOMES

When implementing a social norms model, as with any other programming, it is critical to develop a solid evaluation plan as part of the planning process. Such evaluation will not only provide the needed information for the social norms campaign and for key stakeholders; but, more importantly, it will provide evidence of the program's effectiveness in changing harmful drinking and the resulting negative consequences. The following sections describe how the UA has integrated both quantitative and qualitative evaluation strategies for overall program evaluation.

QUANTITATIVE MEASURES AND FINDINGS

The Campus Health staff worked with a team of evaluators to determine the best strategies and instruments for collecting data. Several critical issues were considered.

Instrumentation:

The first issue addressed was the use of a nationally-recognized instrument versus the development of a program-specific instrument designed to measure student behaviors and attitudes. Use of a nationally-recognized instrument has several benefits. First, it provides an instrument with sound psychometric properties. Second, it allows for comparisons between local and national data sets over time. Unfortunately, some flexibility is lost when using national

instruments. These instruments may not contain information needed to address specific program interests (e.g., behaviors students engage in to protect themselves from harm when they drink). In addition, there are no questions on the national instruments to assess exposure to the campaign or the impact of this exposure on attitudes, perceptions, and behaviors. If such items were simply added to the national instrument, this would lengthen the survey and potentially hinder response rates.

Campus Health staff decided that both types of instruments were important and should be used in the overall evaluation plan. The Core Alcohol and Drug Survey [1] was selected as the national instrument. Because the Core has been used on campus since the UA's first grant from the Fund for the Improvement of Post-Secondary Education in 1992, continued use would allow for comparisons over time. It would also provide comparison with a huge national data set on AOD-related behaviors, perceptions, and trends [3].

For the program-specific instrument, the evaluation team worked with Campus Health staff to develop a set of items that tapped the knowledge, attitudes, perceptions, and behaviors targeted by each program component, including the social norms campaign. In addition, this instrument provides a checklist of program activities to which the respondent could have been exposed, and also asks how often students read the Wildcat. This information targeted frequency of program exposure and provided evaluation insight into the impact of program exposure on desired outcomes. This survey is titled the Health Enhancement Survey (HES) and has been collected since 1996.

A third survey, the Annual Campus Health and Wellness Survey (Annual Survey), was developed by program and evaluation staff to cover a broader range of program information pertinent to the Campus Health Service, but also included selected items from the Core and HES. In addition, the Annual Survey was used to pilot new items for potential incorporation into the HES. For example, the program staff was interested in the potential of expanding the normative campaign to include protective factors (i.e., behaviors which either decrease the level of intoxication or decrease the risk of harm due to drinking), as well as drinking behaviors and consequences. These items were piloted, refined, and then added to the HES.

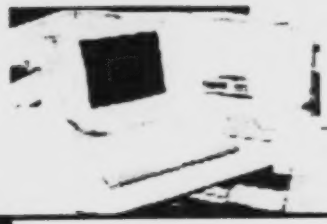
Data Collection:

The second issue focused on methods of data collection. Three routes of administration were considered:

1) random mail survey for best research control
2) mailing to all students in the identified high-risk population (in the UA's case, those living in residence halls and Greek houses)
3) random selection of classrooms to increase return rates.

The UA staff decided to utilize all three procedures.

The Core survey was mailed to a random sample of 1,500 undergraduates, as this was the preferred data collection procedure promoted by the Core Institute for inclusion in their national data set. In addition, the HES survey was distributed via campus mail to all students living in residence halls or Greek houses (the populations identified as at highest risk). The Annual Survey was collected through classroom administration. Beginning in 1998, a random sample of classrooms was taken so that the methodology would be more empirically sound and the findings, therefore, would be more comparable to those collected on the Core and the HES.



Timing of Data Collection:

The third issue for consideration was timing of the data collection. Drinking patterns vary throughout the school year; they are generally heavier in the beginning of the school year. It was decided that all three surveys would be best collected early in the spring semester (prior to spring break) each year. In this way, items on all three surveys could be compared both within and across years. This triangulation of data would allow for a much stronger statement regarding changes over time than any one instrument alone could provide.

Utilizing these surveys, data was collected as shown in Table 1 below (und- represents undergraduate sample):

TABLE 1: Timing of survey administration and sample collected.

		1995	1996	1997	1998	1999
Core	all	n=322		n=293	n=317	
	und-	n=288		n=287	n=307	
HES	all		n=842	n=542	n=746	
	und-		n=839	n=541	n=741	
Annual Survey	all				n=1126	n=1766
	und-				n=1091	n=1582

Response rates varied by year and by survey. Core ranged from 30.0 percent in 1995 to 25.4 percent in 1998 (of the 1500 randomly mailed surveys). While response rates were lower for the HES (approximately 16 percent each year), the survey was sent to all students in residence halls and Greek houses so this is 16 percent of the target population rather than of a sample. The Annual Survey had the highest return rates, approximately 95 percent of those in attendance in the selected classes each year.

Findings:

Over the last four years, students have received the message from multiple sources and alcohol-related behaviors are changing. Highlights of project findings (i.e., statistically significant changes using Pearson's Chi Square Statistic) include:

1. Alcohol Use by Undergraduates

a. Heavy drinking as defined by the "binge drinking" rates decreased 29.2 percent from 43.2 percent of undergraduates in 1995 to 30.6 percent in 1998 ($p \leq .001$) on the Core survey[4] and from 43.4 percent in 1998 to 35.4 percent in 1999 ($p \leq .000$) on the Annual Survey[5]. Similar decreases were found on all three surveys as shown in Figure 7. Figure 7 provides an overview of these three data sets (Core, HES and Annual Survey), all looking at the issue of heavy drinking using the "binge drinking" question. As can be seen across all three surveys, the lines show decreases in "binge drinking" between each data point after 1995 when the social norms campaign was consistently implemented (same message) and in full swing (published in the Wildcat at least once each week throughout the school year).

b. The alcohol use rate (used in the past 30 days) decreased from 73.6 percent in 1995 to 64.6 percent in 1998 ($p \leq .015$) on the Core and from 74.2 percent in 1996 to 66.4 percent in 1998 ($p \leq .001$) on the HES.

c. While 27.6 percent of undergraduates reported increasing their alcohol use (in the past year) on the Core in 1995, only 17.5 percent reported this increase in 1998 ($p \leq .002$).

2. Behaviors Related to Alcohol Consumption for Undergraduates

a. On the HES, 26.1 percent reported having sex after drinking alcohol in 1996.

[4] To calculate the percent change in binge drinking, the number of percentage points that changed between 1995 and 1998 was divided by the 1995 binge rate.

[5] It is hypothesized that the differences in rates between these two surveys in 1998 is due to the type of administration. Response bias is much more likely in the mailed Core (25.4 percent response rate than the Annual Survey administered in classrooms (95 percent return rate).

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This had dropped to 18.0 percent in 1998 ($p \leq .000$).

b. Only 12.2 percent on the 1998 HES reported driving after consuming alcohol while 23.5 percent reported this behavior in 1996 ($p \leq .000$).

c. In 1996, 37.9 percent on the HES said they didn't drink alcohol (at least once in the past thirty days) so they could serve as a designated driver. This had increased to 42.7 percent in 1998 ($p \leq .049$).

3. Alcohol-Related Negative Consequences for Undergraduates

Negative consequences resulting from alcohol consumption in the past year also decreased on the Core from 1995 to 1998 including the following:

a. Gotten into a fight or argument dropped from 32.2 percent to 20.4 percent ($p \leq .001$).

b. Gotten in trouble with campus police or other school authorities dropped from 17.5 percent to 6.3 percent ($p \leq .000$).

c. Did something later regretted dropped from 41.8 percent to 31.2 percent ($p \leq .008$).

d. Was taken advantage of sexually dropped from 14.7 percent to 8.3 percent ($p \leq .015$).

e. Two academic consequences also were reduced from 1995 to 1998. Doing poorly on a test or important project dropped from 22.0 percent to 15.8 percent ($p \leq .037$) and missed class dropped from 33.5 percent to 24.7 percent ($p \leq .017$).

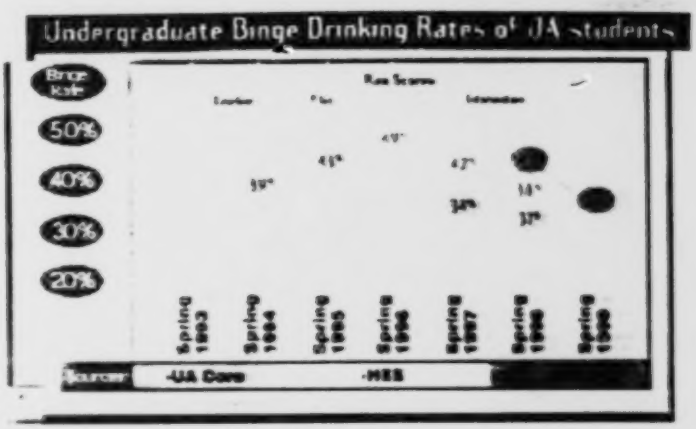

Figure 7

4. Attitudes and Perceptions of Undergraduates

a. On the HES, the percent that believed most UA students have four or fewer drinks when they party increased from 45.8 percent in 1996 to 63.2 percent in 1998 ($p \leq .000$).

b. Two related questions on the HES also showed changes in attitudes/perceptions:

1. In 1996, 37.3 percent agreed that "Alcohol-free events are not as much fun as events with alcohol" while only 28.8 percent agreed with this statement in 1998 ($p \leq .001$).

2. In 1996, 58.0 percent indicated that "They would rather go to a party that served alcohol than one that did not" but in 1998, only 49.9 percent agreed with this statement ($p < .002$).

5. UA Compared to National Core [21]

The following three tables compare the national data between 1995 and 1997 to the UA (all students):

TABLE 2 Frequency of "binge drinking" (having 5 or more drinks at a sitting in the last two weeks)

	1995		1997		1998
	UA	National	UA	National	UA
None	59.8%	58.6%	66.3%	54.4%	69.4%
Once	12.8%	13.2%	13.4%	13.8%	13.2%
Twice	9.0%	10.2%	7.2%	10.2%	7.6%
3 or more	18.4%	18.0%	13.1%	21.5%	9.8%

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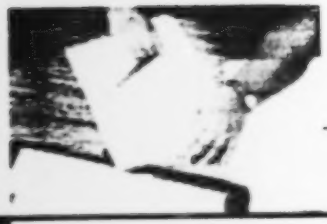

TABLE 3: Frequency of being in trouble with police/residence hall/college authorities due to AOD use within the last year.

	1995		1997		1998
	UA	National	UA	National	UA
Never	84.4%	87.2%	92.4%	85.9%	93.9%
1-2 times	14.1%	10.4%	6.6%	11.6%	5.1%
3 or more	1.5%	2.3%	1.0%	2.5%	1.0%

TABLE 4: Frequency of getting into an argument or fight due to AOD use within the last year.

	1995		1997		1998
	UA	National	UA	National	UA
Never	70.5%	69.6%	78.9%	69.5%	80.2%
1-2 times	21.6%	20.0%	13.9%	20.0%	12.3%
3 or more	7.9%	10.3%	7.2%	10.4%	7.5%

As can be seen, where national trends have stayed basically the same, the UA data shows significant improvements over time.

It should be noted that it is not necessary to conduct two or more surveys annually to ensure quality program evaluation. Because the trends have been fairly consistent across instruments and data collection procedures, data collection has been refined at the UA over time. Beginning in 1999, all key items on the HES were incorporated into the Annual Survey, and now only this survey is administered. Considerable time was spent insuring that the sample of classes was representative of the campus undergraduate population. The Core Survey will continue to be administered through a random mailing every other year, as funds permit, to maintain the national comparison. However, the HES/Annual Survey contains items parallel to those on the Core which hold the most interest for program and evaluation staff and, therefore, collecting the Core is helpful but not essential to the overall program evaluation.

QUALITATIVE MEASURES AND FINDINGS

Campus Health staff use qualitative evaluation measures to provide insight into how the media campaign affects the campus environment and key stakeholder networks. The use of qualitative measures describes the context in which AOD behaviors occur and permits a more holistic examination of processes and outcomes related to social norms intervention.

Multiple qualitative measures are used simultaneously to obtain data from a variety of sources and construct a more complete picture of changes in campus culture and key stakeholder networks. This information is combined with quantitative data to provide a clearer picture than either data set might offer in isolation.

The primary qualitative evaluation methods used are :

1) One-on-one interviews with key informants (stakeholders), conducted at least twice yearly using a standardized interview protocol
2) Focus group interviews with students, conducted on a regular basis, to obtain feedback on the media campaign and to provide contextual data regarding their AOD experiences on campus
3) Observations of key AOD-related events/interventions (e.g., Homecoming, Bid Night, sporting events), conducted on a regular basis, using a standardized observation protocol and multiple observers
4) Interviews with staff and the target audience regarding implementation of the project, conducted at least twice yearly

5) Analysis of secondary data sources (e.g., newspaper articles,newsletters, memos, television stories related to the intervention or with potential impact on the students and stakeholders, student records and reports and critical incidents and anecdotes collected by staff regularly)

The above methods have allowed the Campus Health staff to make changes to the media campaign mid-stream. They have also permitted the staff to monitor the public conversation regarding heavy drinking at the UA. Qualitative findings indicate that the tag line for the primary message, that most UA students have four or fewer drinks when they party, has become readily recognized and repeated by students and staff alike.

An interesting sidebar is that even incoming freshmen/women have, within the last two years, accurately repeated the "four or fewer" phrase, giving rise to speculation that the message is filtering down to high school students. Many of these students still express disbelief regarding its accuracy but, as repeated anecdotes indicate, they are very aware of the normative message.

Qualitative findings also indicate that, over the past five years, public conversation regarding heavy drinking has become less tolerant. Increasingly, there has been greater effort at all levels of UA administration to take the emphasis off alcohol at campus and community events when creating community memories of how to celebrate. Interviews with and memos from key stakeholders in administration indicate that they no longer view heavy drinking as a rite of passage for college students. It is viewed increasingly as a public health risk to both students and the community.

The Campus Health evaluation staff has monitored selected campus events as mini case studies for viewing the effect of policy changes and enforcement on alcohol-related behaviors at these events. Homecoming, traditionally a heavy drinking event at the UA, is one such key campus and community event. The social norms media campaign, coupled with more stringent and uniform enforcement of alcohol-related policies (e.g., increased restrictions on alcohol availability, monitoring of alcohol distribution and consumption, and an earlier game time so that party time before the game is shortened) has significantly reduced alcohol-related incidents as shown in Table 5 below.

TABLE 5: UAPD statistics on criminal activity during homecoming

YEAR OF GAME TIME OF GAME	1994 7:07 pm	1995 1:34 pm	1996 1:30 pm	1997 8:00 pm	1998 7:07 pm
Ejections	4	1	6	0	9
Neighborhood calls	10	3	2	4	1
Arrests for disorderly conduct	1	0	1	0	2
Verbal warnings for liquor	47	14	27	35	31
Arrests for liquor	4	0	3	1	5
Arrests for minor in possession	1	8	7	0	2
Other drug arrests	0	1	0	0	2
Fighting	1	0	1	0	1
Other problems	9	1	0	0	2
Total	77	28	47	40	45

Observations conducted during Homecoming over the past several years, coupled with police reports of alcohol-related incidents during this event, have indicated a decline in alcohol-related negative behaviors. Prior to the adoption of the social norms approach on campus, heavy drinking was endured, despite its negative effects for all involved. Environmental management through more public health and safety-supportive policies, coupled with the social norms approach, has positively affected this key campus event at the UA.

COST OF PRINT MEDIA SOCIAL NORMS CAMPAIGN

Another important aspect of program evaluation is cost-benefit analysis. Within the first two years of implementing the social norms campaign, a cost-benefit analysis was conducted to determine the cost effectiveness of this new approach compared to other AOD programming. UA examined costs of its existing AOD peer education program and the print media campaign. At first glance, the print media appears expensive, complicated and difficult to implement. Upon more in-depth analysis, UA was able to make the following comparisons. These costs are based on the UA experience, with a student body of 34,000 students, and with costs specific to the Tucson area in the mid to late 1990s. At the most, these estimates may give an institution a starting point when beginning to cost-out a social norms media campaign. Actual costs will differ from campus to campus.

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PEER EDUCATOR PRESENTATIONS

Staff time invested in training and maintenance

Classroom Training

(2.5 hours/week X 16 weeks = 40 hours)

Weekly meeting and continuing education, fall and spring semesters

(5 hours/week X 30 weeks = 150 hours)

Preparation time, record keeping, phone calls, letters, research

(5 hours/week X 37 weeks = 185 hours)

Total staff time investment=375 hours

Total staff cost *$3,500*

(includes time of Graduate Assistant who had primary responsibility for the program and Program Coordinator's time for supervision)

AOD Peer Stipends (per year) *$144*

Total costs for one year **$3,644**

Peer Education Time Return - Presentations

(based on Fall semester 1995)

3 peers gave 9 presentations reaching 205 students (time=18 hours)

Cost Per Presentation = $3,644 divided by 9 presentations = $404

Cost Per Student Reached = $3,644 divided by 205 students = $17.78 per student

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STUDENT NEWSPAPER AD CAMPAIGN

Ad placement in Arizona Daily Wildcat *$5,400*

(3X8 inch ad costs $180, placed once/week for 30 weeks)

Student workers to get feedback on ads *$210*

(minimum wage to $7/hour for 5 hours/week during development phase which lasts 6 weeks)

Models for photographs *$500*

(compensated with $15-$25 gift certificates to the bookstore)

Media Team Time *$11,800*

(Director of Health Promotion @4 hrs/month, AOD Coordinator @ 16 hrs/month, 2 Prevention Specialists @ 4 hrs/month, Graphic Designer @ 44 hrs/month)

Photographer ($40/hour) *$640*

Total costs for one year **$18,550**

Total cost = $18,550 divided by 30 (# of ads) = $618

$618 divided by 20,000 (daily readership) = $.03 per person per ad

POSTERS

In addition to the Wildcat ads, posters for distribution in residence halls, Athletic Department office areas and Campus Health have also been developed. The production costs for these posters are included in the production costs outlined above, as they were developed simultaneously. The only additional cost for the poster campaign was for printing. Three posters were developed and 250 copies were printed of each at a cost of $.57 per copy. The total printing costs were $430.

The cost of implementing a social norms approach in college and university settings depends upon several factors including:

1) Size of institution
2) Cost of advertising in student newspaper
3) Cost of other means of broadcasting the normative message (e.g., campus radio, television, newsletters and posters)
4) Availability of existing staff
5) Expertise and experience of staff

SUSTAINING SOCIAL NORMS AND ENVIRONMENTAL MANAGEMENT EFFORTS OVER TIME

Social norms efforts require a long-term commitment by colleges and universities for maximum, long-lasting results. The UA saw a 22 percent drop in heavy drinking within 18 months of the start of the program and an impressive 29 percent drop in heavy drinking rates three years into the implementation of the social norms and environmental management approaches.

The success of these approaches, in the long-term, depends upon five factors.

1. CHANGING PARADIGMS

The social norms approach requires a change in perceptions and attitudes among prevention staff as they move from reactive approaches to positive, normative ones. This approach also requires prevention staff to gain new competencies in market research techniques and community organizing strategies and to learn how to work in concert with graphic artists, marketing research professionals, and others with backgrounds different from their own. It may initially seem unfamiliar and uncomfortable to health educators. However, their comfort level will rise with more training and experience.

2. EXPANDING PROGRAM INFLUENCE

Often program staff will make the mistake of relying exclusively on their own competence and commitment to make a program work. They may see the program succeed temporarily but then fail with staff turnover

and competing priorities. This can also happen to the social norms approach if staff become the experts and sole caretakers of the program. A better strategy encourages staff to integrate social norming across campus through discussions, trainings and patient but persistent communication. Such efforts require purposeful relationship-building.

Once key stakeholders around campus have adopted the social norms approach, it is less vulnerable to staff turnover or organizational changes. Ultimately, it becomes an integral part of the institution's identity and infrastructure. As staff members move on and as students move through their tenure at the institution, the social norms approach remains a constant. This is what culture change is all about, and it is why winning ongoing stakeholder support is critical for the social norms approach to become a permanent, effective prevention paradigm.

3. FOCUSING ON THE CAMPUS COMMUNITY, NOT THE INDIVIDUAL

The social norms and environmental management approaches are focused on the macro- rather than the micro-view of campus life. Their effectiveness depends on change within the campus and the surrounding community. Many other prevention approaches focus predominantly on individuals, and campuses spend their prevention dollars and resources accordingly. The social norms and environmental management approaches require the reallocation of resources to address community-wide change.

4. WINNING ADMINISTRATIVE SUPPORT

Support from senior administration is critical whenever policy change is part of the campus prevention agenda. If a college or university maintains a hands-off stance when it comes to student drinking, it will be difficult to initiate meaningful AOD-related policy change. Meaningful change may also require senior administration to take an unpopular stance with liquor distributors and other powerful lobby groups when they try to promote AOD-related products on campus [22].

In addition, adopting a social norms approach requires reframing data on campus alcohol use so that it emphasizes the moderate, positive behaviors of the majority of students. This contradicts common institutional tendencies, which emphasize the dangers of drinking as a way to scare high-risk students into acting more responsibly.

Some campuses even hesitate to engage in research on student alcohol use because they fear that such data will negatively impact the institution's reputation and image. The administration of the Core Survey and other AOD-related surveys demand strong administrative support and leadership since such data-gathering is the cornerstone of the social norms approach.

5. STRESSING RESEARCH AND EVALUATION

As noted earlier in this guide, the social norms approach is research-based. The information used in social norms ads is based on actual data collected from the target population. Campuses short on funds may be tempted to eliminate the research and adopt a one size fits all approach by using ads from another campus. Though certainly cost-effective, such short-cuts jeopardize the integrity and effectiveness of the social norms approach. Unless students perceive the data to be credible, coming from students like themselves, the approach may have limited impact.

Research is needed to find out what the norms on campus actually are. Additional research, conducted through focus groups, student intercepts, and paper and pencil tests is needed for student feedback on the proposed social norms media campaign. Evaluation is then key to determining how students actually perceive the ads once they appear. More importantly, evaluation is needed to track changes in reported and actual drinking behaviors once the media campaign is solidly in place.

CLOSING COMMENTS AND CHALLENGES TO THE FIELD

In reviewing our experiences using social norms and environmental management approaches, a number of issues have surfaced that have implications for UA's future prevention efforts, and may also have implications for the college alcohol prevention field. Our experience over the past five years suggests the following.

1) **The strength of the social norms approach is in the marketing.**
Student survey data suggests the messages are being heard and believability is increasing but only with multiple exposures to the message.

2) **Alcohol related policies, practices and drinking data need to be linked.**
Competing messages in the environment or alcohol policies that support only abstinence or are inconsistently enforced undermine the believability of moderate alcohol use norms.

3) **Using the term "binge drinking" and focusing on problem drinking does not necessarily lead to positive action.**
College personnel and others confuse "binge drinking" with typical college drinking and may alienate students and potential community partners alike with language that implies drunkeness and negative experiences to describe student drinking habits.

4) **Stakeholders need to receive information about safer and healthier levels of use.**

5) **Public awareness campaigns may be successful at bringing prevention resources to our campuses but may also undermine the believability of campus drinking norms data.**
Students and stakeholders are being exposed to the tragic implications of college substance abuse through the national media more than ever before.

6) **The focus on "how much" students drink is too narrow and should be expanded to include other factors that can reduce harm.**
Other factors may include behaviors that slow intoxication and increase safety if a student is already intoxicated.

7) **Social norms and environmental management approaches have been effective at UA, a large four year state institution.**
Effectiveness of these approaches at institutions with special populations or in community colleges has yet to be determined.

8) **Big changes are often easier to make than small changes.**
Be bold in adopting a new approach and eliminating traditional approaches that have not reduced heavy drinking or related harm. This holds true for policy changes as well. For example, staff requested that Homecoming be shortened by one hour, game time be moved to afternoons instead of evenings, kegs be eliminated and alcohol service be limited to a single point of sale - "three out of four isn't bad."

In addition, there are many questions that have arisen as a result of these efforts including the following:

1) **Have we identified the most strategic and cost effective methods of delivering social norms messages to students?**
For example, have we considered all other important channels for student information, i.e., people, places and curricula, in addition to media or more traditional substance abuse prevention programming?

2) **Have we identified strategic policy and enforcement targets?**
Some policy and enforcement targets (e.g., "dry rush" or mandatory orientation sessions on the negative impact of alcohol use) seem to make common sense; but, there is little evidence that they produce less drinking or safer drinking among college students.

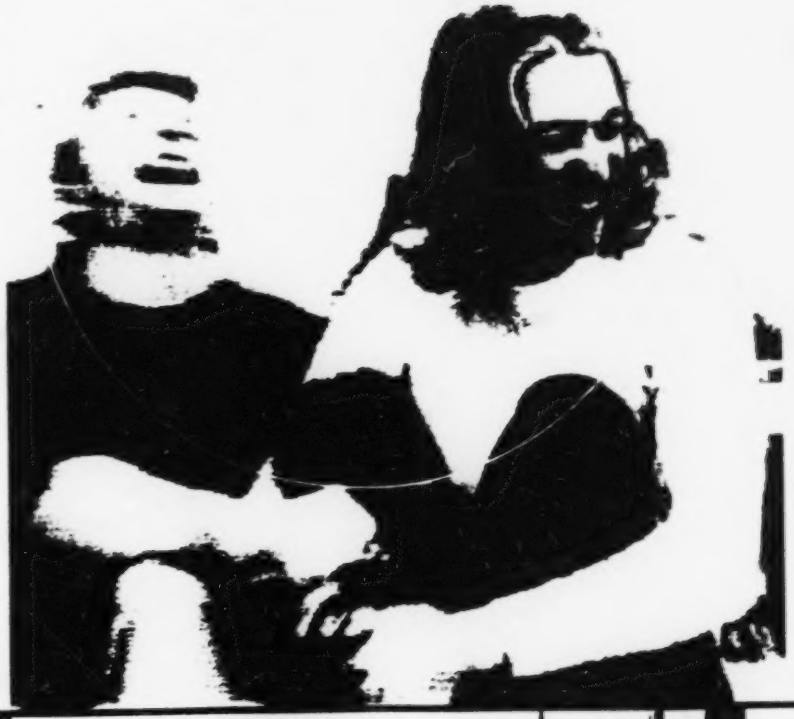
3) **Can social norms and environmental management approaches meet the substance abuse prevention goals of the institution and the community?**
The UA criteria for a successful project centered on the public health goals of reducing harm and risk to the individual and community. Another institution may judge success by other criteria (e.g., increased retention or decreased liability of the institution).

UA's experience with this demonstration project leaves many unanswered questions that only a research effort can address. Research efforts that provide a close collaboration between scientist and practitioner are needed. In conclusion, it has been our privilege to have had the resources necessary to explore social norms and environmental management approaches at the UA. With this privilege comes the responsibility to be balanced in our assessment of these strategies. However, it is difficult for us to harness our enthusiasm for the potential of this model. It has changed the way we think about alcohol use on our campus.

" The key to success is multiple exposures to positive majority information."
-K. Johannessen

REFERENCES

1. Presley, C.H. and Meilman, P.W. (1989). The Core Alcohol and Drug Survey. Carbondale, IL: The Core Institute, Southern Illinois University.
2. Wechsler, H., Davenport, A., Dowdall, G., Moeykins, B. and Castillo, S. (1994). Health and behavioral consequences of binge drinking in college: A national survey of students at 140 campuses. Journal of the American Medical Association, 272 (21): 1672-1677.
3. Presley, C.H., Meilman, P.W. and Cashin, J.R. (1996). Alcohol and Drugs on American College Campuses: Use, Consequences and Perceptions of the Campus Environment, Volume IV: 1992-1994. Carbondale, IL: The Core Institute, Southern Illinois University.
4. Johnston, L.D., O'Malley, P.M. and Bachman, J.G. (1994). National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1993, Vol. 2: College Students and Young Adults. Washington, D.C.: U.S. Government Printing Office, NIH Publication No. 94-3810.
5. National Highway Traffic Safety Administration (1995). Youth Fatal Crashes and Alcohol Facts, 1994. U. S. Department of Transportation.
6. National Institute on Alcohol Abuse and Alcoholism (1997). Ninth Special Report to the U.S. Congress on Alcohol and Health. Rockville, MD: NIAAA, NIH Publication No. 97-4017.



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REFERENCES

7. Goodstadt, M.S. (1986). School-based drug education in North America: What is wrong? What can be done? Journal of School Health, 56 (7): 278-281.

8. Gonzales, G.M. (1991). Five-year changes in alcohol knowledge, consumption and problems among students exposed to a campus-wide alcohol awareness program and a rise in the legal drinking age. Journal of Alcohol and Drug Education, 37: 81-91.

9. Oblander, F.W. (1984). Effective alcohol education strategies. ACU-I Bulletin, 52: 17-25.

10. Kraft, D.P. (1988). The prevention and treatment of alcohol problems on a college campus. Journal of Alcohol and Drug Education, 34 (1): 37-51.

11. Flynn, C.A. and Brown, W.E. (1991). The effects of a mandatory alcohol education program on college student problem drinkers. Journal of Alcohol and Drug Education, 37: 15-24.

12. Perkins, H.W. and Berkowitz, A.D. (1986). Perceiving the community norms of alcohol use among students: Some research implications. The International Journal of the Addictions, 21 (9): 44-50.

13. Perkins, H.W. (1997). College student misperceptions of alcohol and other drug norms among peers: Exploring causes, consequences and implications for prevention programs. In Designing Alcohol and Other Drug Prevention Programs in Higher Education: Bringing Theory Into Practice. Boston, MA: The Higher Education Center for Alcohol and Other Drug Prevention, U.S. Department of Education, 177-206.

14. Haines, M.P. (1996). A Social Norms Approach to Preventing Binge Drinking at Colleges and Universities. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention, Education Development Center, Inc. (Available by calling 1-800-676-1730 or Fax: 617-928-1537).

15. Haines, M. (1992). Using Media to Prevent Alcohol Abuse: A Tested Model. Workshop presented at the Sixth Annual FIPSE Grantee Meeting, Washington, D.C. October 23-26.

16. Haines, M. (1998). Social norms a wellness model for health promotion in higher education. Wellness Management, 14(4), 1,8.

17. Haines, M. (1998). Community-generated protective norms reduce risk and promote health. College Health in Action, 37(4), 1,5.

18. DeJong, W., Vince-Williams, C., Colthurst, T., Cretella, M., Gilbreath, M., Rosati, M and Zweig, K. (1998). Environmental Management: A Comprehensive Strategy for Reducing Alcohol and Other Drug Use on College Campuses. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention (Available by calling 1-800-676-1730 or Fax: 617-928-1537).

19. Ryan, B.E., Colthurst, T. and Segars, L. (1994). College Alcohol Risk Assessment Guide: Environmental Approaches to Prevention. San Diego, CA: University of California, Alcohol, Tobacco and Other Drug Studies.

20. Johannessen, K., Glider, P., Collins, C., Hueston, H. and DeJong, W. (Unpublished). Preventing alcohol-related problems at The University of Arizona's Homecoming: An environmental management case study.

21. Presley, C., Leichliter, J. and Meilman, P. (1998). Alcohol and Drugs on American College Campuses: A Report to College Presidents. Carbondale, IL: Core Institute, Southern Illinois University.

22. DeJong, W. (1999). Fund raising for campus-based alcohol and other drug prevention: A marketing perspective. College Health in Action, 39(1), 1,7.

RESOURCES

The listing below notes other resources, articles and books about the social norms and environmental approaches, including references for program evaluation.

DeJong, W. and Winsten, J. (1998). The Media and the Message. Washington, D.C.: The National Campaign to Prevent Teen Pregnancy.

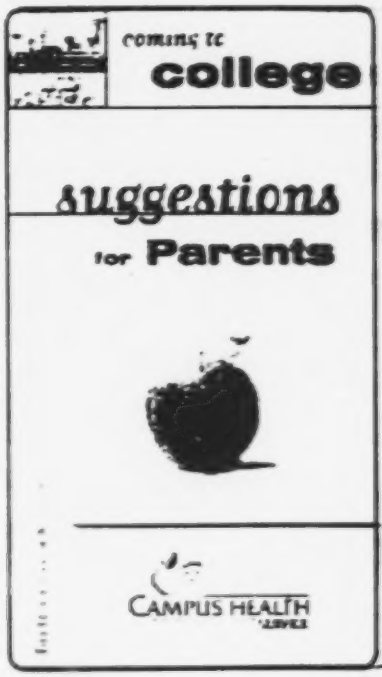
Glider, P., Midyett, J., Mills-Novoa, B., Johannessen, K., and Collins, C. (In press). Challenging the collegiate rite of passage: A campus-wide social marketing media campaign to reduce binge drinking. Journal of Drug Education.

Mills-Novoa, B., Ferguson, J., Glider, P., Johannessen, K., Collins, C., and DeArmond, M. (In review). Changes in the "public conversation" regarding binge drinking through the use of a campus-wide social marketing media campaign on a large university campus. Journal of Drug Education.

U.S. Department of Health and Human Services (1992). Making Health Communication Programs Work. Bethesda, MD: National Cancer Institute, Public Health Service.

Wallack, L., Dorfman, L., Jernigan, D., & Themba, M. (1993). Media Advocacy and Public Health: Power for Prevention. Newbury Park, CA: Sage Publications.

Zimmerman, R. (1997). Social Marketing Strategies for Campus Prevention of Alcohol and Other Drug Problems. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention. (Available by calling 1-800-676-1730 or Fax: 617-928-1537).



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RESEARCH/EVALUATION RESOURCES

Debus, M. (1990). Handbook for Excellence in Focus Group Research. Washington, D.C: Academy for Educational Development.

DeJong, W. and Wechsler, H. (1998). Preventing Alcohol-Related Problems on Campus: Methods for Assessing Student Use of Alcohol and Other Drugs. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention. (Available by calling 1-800-676-1730 or Fax: 617-928-1537

Muraskin, L. (1993). Understanding Evaluation: The Way to Better Prevention Programs. Westat, Inc. Available through the Higher Education Center for Alcohol and Other Drug Prevention (Available by calling 1-800-676-1730 or Fax: 617-928-1537).

Patton, M.Q. (1990). Qualitative Evaluation and Research Methods. Newbury Park, CA: Sage Publications.

Presley. C., Austin, B. and Jacobs, J. (1998). Selecting the Right Tool: A Compendium of Alcohol and Other Drug Assessment and Evaluation Instruments for Use in Higher Education. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention. (Available by calling 1-800-676-1730 or Fax: 617-928-1537

OTHER RESOURCES

The Higher Education Center for Alcohol and Other Drug Prevention (HEC), 4800 Montgomery Lane, Suite 600, Bethesda, MD 2081, is the U.S. Department of Education's national center to support campus alcohol and other drug prevention efforts. The Center provides free access to information, materials, technical assistance, training and Center publications. For information on Center services, call **800/676-1730** (in Maryland 301/492-5336).

National Clearinghouse for Alcohol and Drug Information (NCADI), P.O. Box 2345, Rockville, MD 20852, is the information service of the Center for Substance Abuse Prevention (CSAP) of the U.S. Department of Health and Human Services. Its catalog of materials feature publications ranging from research monographs to fact sheets, including a set of college materials.

Most publications are free. To receive a catalog, which also describes NCAD services, call **1-800-SAY NO-TO (729-6686).**

For more information about the UA program log on to:

www.SocialNorms.CampusHealth.net

Sample materials available include:

Ads and Posters

Health Enhancement Survey

Annual Survey

Model Consent Form

Parent Orientation Brochure

Hall Director Update

Campus/Community Coalition Newsletter to Parents

3D Memo
(Deans, Directors, and Department Heads)

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